

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/721,297

Source: 1Fw16

Date Processed by STIC: 11/29/05

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 11/29/2005

PATENT APPLICATION: US/10/721,297

TIME: 10:14:30

Input Set : D:\UNI9194-6US.ST25.txt

Output Set: N:\CRF4\11292005\J721297.raw

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3 <110> APPLICANT: Sudhof, Thomas C.
4      Li, Qiming
6 <120> TITLE OF INVENTION: COMPOSITIONS, METHODS AND ASSAYS RELATED TO
SECRETASE CLEAVAGE
7      SPECIFICITY
9 <130> FILE REFERENCE: UNI919/4-006US
11 <140> CURRENT APPLICATION NUMBER: 10/721,297
12 <141> CURRENT FILING DATE: 2003-11-25
14 <160> NUMBER OF SEQ ID NOS: 29
16 <170> SOFTWARE: PatentIn version 3.3
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 7
20 <212> TYPE: PRT
21 <213> ORGANISM: Artificial
23 <220> FEATURE:
24 <223> OTHER INFORMATION: APP B-secretase binding site
26 <400> SEQUENCE: 1
28 Glu Val Lys Met Asp Ala Glu
29 1          5
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 13
34 <212> TYPE: PRT
35 <213> ORGANISM: Artificial
37 <220> FEATURE:
38 <223> OTHER INFORMATION: APLP1 B-secretase cleavage site
40 <400> SEQUENCE: 2
42 Asp Glu Leu Ala Pro Ala Gly Thr Gly Val Ser Arg Glu
43 1          5          10
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 30
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Synthetic oligonucleotides
54 <400> SEQUENCE: 3
55 ggccgagaag tgaagatgga tgcagaaagc
58 <210> SEQ ID NO: 4
59 <211> LENGTH: 30
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Synthetic oligonucleotides
66 <400> SEQUENCE: 4
67 ggccgctttc tgcattcagg ttcacttctc

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Input Set : D:\UNI9194-6US.ST25.txt

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70 &lt;210&gt; SEQ ID NO: 5

71 &lt;211&gt; LENGTH: 15

72 &lt;212&gt; TYPE: PRT

73 &lt;213&gt; ORGANISM: Artificial

75 &lt;220&gt; FEATURE:

76 &lt;223&gt; OTHER INFORMATION: Synthetic peptides

78 &lt;400&gt; SEQUENCE: 5

80 Gly Tyr Glu Asn Pro Thr Tyr Lys Phe Phe Glu Gln Met Gln Asn

81 1 5 10 15

84 &lt;210&gt; SEQ ID NO: 6

85 &lt;211&gt; LENGTH: 13

86 &lt;212&gt; TYPE: PRT

87 &lt;213&gt; ORGANISM: Artificial

89 &lt;220&gt; FEATURE:

90 &lt;223&gt; OTHER INFORMATION: Synthetic peptides

92 &lt;400&gt; SEQUENCE: 6

94 Tyr Glu Asn Pro Thr Tyr Arg Phe Leu Glu Glu Arg Pro

95 1 5 10

98 &lt;210&gt; SEQ ID NO: 7

99 &lt;211&gt; LENGTH: 21

100 &lt;212&gt; TYPE: PRT

101 &lt;213&gt; ORGANISM: Artificial

103 &lt;220&gt; FEATURE:

104 &lt;223&gt; OTHER INFORMATION: Synthetic peptides

106 &lt;400&gt; SEQUENCE: 7

108 Asn Lys Met Gln Asn His Gly Tyr Glu Asn Pro Thr Tyr Lys Tyr Leu

109 1 5 10 15

112 Glu Gln Met Gln Ile

113 20

116 &lt;210&gt; SEQ ID NO: 8

117 &lt;211&gt; LENGTH: 14

118 &lt;212&gt; TYPE: PRT

119 &lt;213&gt; ORGANISM: Artificial

121 &lt;220&gt; FEATURE:

122 &lt;223&gt; OTHER INFORMATION: Synthetic peptides

124 &lt;400&gt; SEQUENCE: 8

126 Val Pro Arg Gly Glu Pro Phe His Ser Ser Glu Ile Gln Arg

127 1 5 10

130 &lt;210&gt; SEQ ID NO: 9

131 &lt;211&gt; LENGTH: 8

132 &lt;212&gt; TYPE: PRT

133 &lt;213&gt; ORGANISM: Artificial

135 &lt;220&gt; FEATURE:

136 &lt;223&gt; OTHER INFORMATION: APP B-secretase cleavage site containing the Swedish mutation

138 &lt;400&gt; SEQUENCE: 9

140 Glu Val Asn Leu Asp Ala Glu Ser

141 1 5

144 &lt;210&gt; SEQ ID NO: 10

145 &lt;211&gt; LENGTH: 7

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Input Set : D:\UNI9194-6US.ST25.txt

Output Set: N:\CRF4\11292005\J721297.raw

146 <212> TYPE: PRT  
 147 <213> ORGANISM: Artificial  
 149 <220> FEATURE:  
 150 <223> OTHER INFORMATION: APP B-secretase cleavage site with Swedish  
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 152 <400> SEQUENCE: 10  
 154 Glu Val Asn Leu Asp Ala Glu  
 155 1 5  
 158 <210> SEQ ID NO: 11  
 159 <211> LENGTH: 171  
 160 <212> TYPE: PRT  
 161 <213> ORGANISM: Homosapiens  
 163 <400> SEQUENCE: 11  
 165 Met Leu Lys Lys Tyr Val Arg Ala Glu Gln Lys Asp Arg Gln His Thr  
 166 1 5 10 15  
 169 Leu Lys His Phe Glu His Val Arg Met Val Asp Pro Lys Lys Ala Ala  
 170 20 25 30  
 173 Gln Ile Arg Ser Gln Val Met Thr His Leu Arg Val Ile Tyr Glu Arg  
 174 35 40 45  
 177 Met Asn Gln Ser Leu Ser Leu Leu Tyr Asn Val Pro Ala Val Ala Glu  
 178 50 55 60  
 181 Glu Ile Gln Asp Glu Val Asp Glu Leu Leu Gln Lys Glu Gln Asn Tyr  
 182 65 70 75 80  
 185 Ser Asp Asp Val Leu Ala Asn Met Ile Ser Glu Pro Arg Ile Ser Tyr  
 186 85 90 95  
 189 Gly Asn Asp Ala Leu Met Pro Ser Leu Thr Glu Thr Lys Thr Thr Val  
 190 100 105 110  
 193 Glu Leu Leu Pro Val Asn Gly Glu Phe Ser Leu Asp Asp Leu Gln Pro  
 194 115 120 125  
 197 Trp His Ser Phe Gly Ala Asp Ser Val Pro Ala Asn Thr Glu Asn Glu  
 198 130 135 140  
 201 Val Glu Pro Val Asp Ala Arg Pro Ala Ala Asp Arg Gly Leu Thr Thr  
 202 145 150 155 160  
 205 Arg Pro Gly Ser Gly Leu Thr Asn Ile Lys Thr  
 206 165 170  
 209 <210> SEQ ID NO: 12  
 210 <211> LENGTH: 62  
 211 <212> TYPE: PRT  
 212 <213> ORGANISM: Homosapiens  
 214 <400> SEQUENCE: 12  
 216 Glu Glu Ile Ser Glu Val Lys Met Asp Ala Glu Phe Arg His Asp Ser  
 217 1 5 10 15  
 220 Gly Tyr Glu Val His His Gln Lys Leu Val Phe Phe Ala Glu Asp Val  
 221 20 25 30  
 224 Gly Ser Asn Lys Gly Ala Ile Ile Gly Met Val Gly Gly Val Val Ile  
 225 35 40 45  
 228 Thr Val Ile Val Ile Thr Leu Val Met Leu Lys Lys Lys Gln  
 229 50 55 60  
 232 <210> SEQ ID NO: 13  
 233 <211> LENGTH: 43

## RAW SEQUENCE LISTING

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Input Set : D:\UNI9194-6US.ST25.txt

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234 <212> TYPE: PRT
235 <213> ORGANISM: Homosapiens
237 <400> SEQUENCE: 13
239 Tyr Thr Ser Ile His His Gly Val Val Glu Val Asp Ala Ala Val Thr
240 1 5 10 15
243 Pro Glu Glu Arg His Leu Ser Lys Met Gln Gln Asn Gly Tyr Glu Asn
244 20 25 30
247 Pro Thr Tyr Lys Phe Phe Glu Gln Met Gln Asn
248 35 40
251 <210> SEQ ID NO: 14
252 <211> LENGTH: 79
253 <212> TYPE: PRT
254 <213> ORGANISM: Homosapiens
256 <400> SEQUENCE: 14
258 Ala Leu Arg Arg Tyr Leu Arg Ala Glu Gln Lys Glu Gln Arg His Thr
259 1 5 10 15
262 Leu Arg His Tyr Gln His Val Ala Ala Val Asp Pro Glu Lys Ala Gln
263 20 25 30
266 Gln Met Arg Phe Gln Val His Thr His Leu Gln Val Ile Glu Glu Arg
267 35 40 45
270 Val Asn Gln Ser Leu Gly Leu Leu Asp Gln Asn Pro His Leu Ala Gln
271 50 55 60
274 Glu Leu Arg Pro Ile Gln Glu Leu Leu His Ser Glu His Leu Gly
275 65 70 75
278 <210> SEQ ID NO: 15
279 <211> LENGTH: 6
280 <212> TYPE: PRT
281 <213> ORGANISM: Homosapiens
283 <400> SEQUENCE: 15
285 Pro Ser Glu Leu Glu Ala
286 1 5
289 <210> SEQ ID NO: 16
290 <211> LENGTH: 18
291 <212> TYPE: PRT
292 <213> ORGANISM: Homosapiens
294 <400> SEQUENCE: 16
296 Pro Ala Pro Gly Gly Ser Ser Glu Asp Lys Gly Gly Leu Gln Pro Pro
297 1 5 10 15
300 Asp Ser
304 <210> SEQ ID NO: 17
305 <211> LENGTH: 6
306 <212> TYPE: PRT
307 <213> ORGANISM: Homosapiens
309 <400> SEQUENCE: 17
311 Lys Asp Asp Thr Pro Met
312 1 5
315 <210> SEQ ID NO: 18
316 <211> LENGTH: 14
317 <212> TYPE: PRT

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/721,297

DATE: 11/29/2005

TIME: 10:14:30

Input Set : D:\UNI9194-6US.ST25.txt

Output Set: N:\CRF4\11292005\J721297.raw

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318 <213> ORGANISM: Homosapiens
320 <400> SEQUENCE: 18
322 Thr Gly Pro Lys Gly Ser Gly Ser Thr Glu Gln Asp Ala Ala
323 1 5 10
326 <210> SEQ ID NO: 19
327 <211> LENGTH: 5
328 <212> TYPE: PRT
329 <213> ORGANISM: Homosapiens
331 <400> SEQUENCE: 19
333 Ser Pro Glu Lys Glu
334 1 5
337 <210> SEQ ID NO: 20
338 <211> LENGTH: 112
339 <212> TYPE: PRT
340 <213> ORGANISM: Homosapiens
342 <400> SEQUENCE: 20
344 Lys Met Asn Pro Leu Glu Gln Tyr Glu Arg Lys Val Asn Ala Ser Val
345 1 5 10 15
348 Pro Arg Gly Phe Pro Phe His Ser Ser Glu Ile Gln Arg Asp Glu Leu
349 20 25 30
352 Ala Pro Ala Gly Thr Gly Val Ser Arg Glu Ala Val Ser Gly Leu Leu
353 35 40 45
356 Ile Met Gly Ala Gly Gly Gly Ser Leu Ile Val Leu Ser Met Leu Leu
357 50 55 60
360 Leu Arg Arg Lys Lys Pro Tyr Gly Ala Ile Ser His Gly Val Val Glu
361 65 70 75 80
364 Val Asp Pro Met Leu Thr Leu Glu Glu Gln Gln Leu Arg Glu Leu Gln
365 85 90 95
368 Arg His Gly Tyr Glu Asn Pro Thr Tyr Arg Phe Leu Glu Glu Arg Pro
369 100 105 110
372 <210> SEQ ID NO: 21
373 <211> LENGTH: 75
374 <212> TYPE: PRT
375 <213> ORGANISM: Homosapiens
377 <400> SEQUENCE: 21
379 Ala Leu Arg Arg Tyr Val Arg Ala Glu Asn Lys Asp Arg Ile His Thr
380 1 5 10 15
383 Ile Arg His Tyr Gln His Val Leu Ala Val Asp Pro Glu Lys Ala Ala
384 20 25 30
387 Gln Met Lys Ser Gln Val Met Thr His Leu His Val Ile Glu Glu Arg
388 35 40 45
391 Arg Asn Gln Ser Leu Ser Leu Leu Tyr Lys Val Pro Tyr Val Ala Gln
392 50 55 60
395 Glu Ile Gln Glu Glu Ile Asp Glu Leu Leu Gln
396 65 70 75
399 <210> SEQ ID NO: 22
400 <211> LENGTH: 18
401 <212> TYPE: PRT
402 <213> ORGANISM: Homosapiens

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/721,297

DATE: 11/29/2005  
TIME: 10:14:31

Input Set : D:\UNI9194-6US.ST25.txt  
Output Set: N:\CRF4\11292005\J721297.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,29

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/721,297

DATE: 11/29/2005

TIME: 10:14:31

Input Set : D:\UNI9194-6US.ST25.txt

Output Set: N:\CRF4\11292005\J721297.raw